What is claimed is:

1. A method for determining position of an optic pick-up head (CPLH) relative to a disk with a plurality of sections, each section corresponding to an upper limit and a lower limit, comprising the steps of:

5   (1) reading sync signals on the disk;

(2) generating an averaged sync signals in certain rotations of the disk;

(3) comparing the averaged sync signal with the upper limit and the lower limit to determine a current section where the pick-up head is located.

10   2. The method as claimed in claim 1, wherein the step of (2) generating the averaged sync signals includes: (a) determining a rotation frequency of the disk based on the moving speed of the PUH and the distance between the PUH and a center of disk; and (b) calculating sync signals in certain rotation of the disk.

15   3. The method as claimed in claim 1, further comprising a step (4) of generating a PUH ready signal indicating the PUH in a steady state, based on a frequency variation signal, a track on success signal and the rotation frequency of the disk.

4. The method as claimed in claim 3, wherein the PUH ready signal is
20   enabled when the frequency variation state is de-asserted and the track on success signal is asserted.

5. A device for determining the position of an optic pick-up head relative to a disk with a plurality of sections, each section corresponding to an upper limit and a lower limit, comprising:

25   a position detector for receiving a frequency variation (FA), a track on success signal (TOS), and a frequency of disk rotation (FODR) signal and outputting a pick-up head ready signal (PUHRDY); and

a position condition detecting unit for receiving a frame synchronous signal (FRAMESYNC) and a disk rotating frequency signal (FODR),
30   and outputting an optic pick-up head position signal; wherein the effectiveness of the optic pick-up head position refers to a condition of the pick-up head ready signal.

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6. The device as claimed in claim 5, wherein the position condition detecting unit further comprises:

a counting unit, receiving the FRAMESYNC signal and the FODR signal and outputting a FRAMESYNC per FODR;

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a position counting unit, receiving the feedback position signal, and outputting an upper limit and a lower limit of current section;

a comparing unit, receiving the FRAMESYNC per FODR, the upper limit and lower limit of the current section and outputting the optic pick-up head position signal.

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